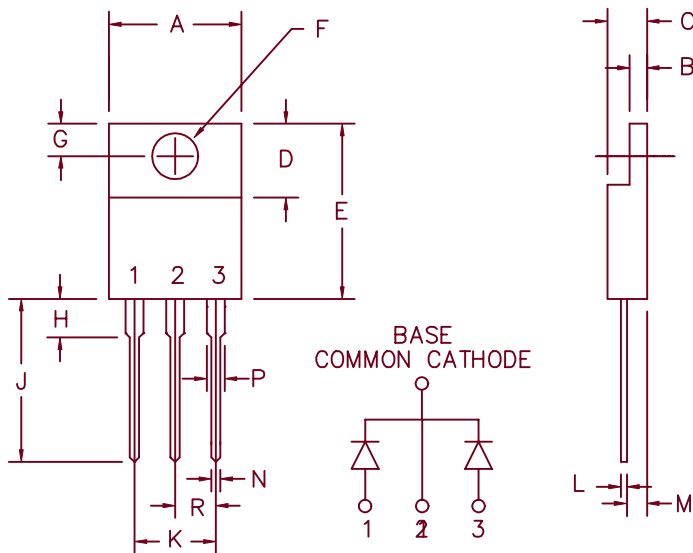


Ultra Fast Recovery Rectifiers UFT2060 — UFT2080



| Dim. | Inches | | Millimeter | | Notes |
|------|---------|---------|------------|---------|-------|
| | Minimum | Maximum | Minimum | Maximum | |
| A | .390 | .415 | 9.91 | 10.54 | |
| B | .045 | .055 | 1.14 | 1.40 | |
| C | .180 | .190 | 4.57 | 4.83 | |
| D | .245 | .260 | 6.22 | 6.60 | |
| E | .550 | .650 | 13.97 | 16.51 | |
| F | .139 | .161 | 3.53 | 4.09 | Dia. |
| G | .100 | .135 | 2.54 | 3.43 | |
| H | --- | .250 | --- | 6.35 | |
| J | .500 | .580 | 12.70 | 14.73 | |
| K | .190 | .210 | 4.83 | 5.33 | |
| L | .014 | .022 | .350 | .550 | |
| M | .080 | .115 | 2.03 | 2.92 | |
| N | .015 | .040 | .380 | 1.02 | |
| P | .045 | .070 | 1.14 | 1.78 | |
| R | .090 | .110 | 2.29 | 2.79 | |

PLASTIC TO-220AB

| Microsemi Catalog Number | Repetitive Peak Reverse Voltage | Transient Peak Reverse Voltage |
|--------------------------|---------------------------------|--------------------------------|
| UFT2060 | 600V | 600V |
| UFT2070 | 700V | 700V |
| UFT2080 | 800V | 800V |

- Ultra Fast Recovery Rectifier
- 175°C Junction Temperature
- 2 x 10 Amp current rating
- V_{RRM} 600 to 800 Volts
- t_{rr} 70ns maximum

| Electrical Characteristics | | |
|---------------------------------------|---------------------|--|
| Average Forward Current per pkg. | $I_F(AV)$ 20 Amps | $T_C = 153^\circ C$, Square wave, $R_{\theta JC} = 1.0^\circ C/W$ |
| Average Forward Current per leg | $I_F(AV)$ 10 Amps | $T_C = 153^\circ C$, Square wave, $R_{\theta JC} = 2.0^\circ C/W$ |
| Maximum Surge Current per leg | I_{FSM} 175 Amps | 8.3ms, half sine, $T_J = 175^\circ C$ |
| Max. Peak Forward Voltage per leg | V_{FM} 1.25 Volts | $I_{FM} = 10A, T_J = 25^\circ C^*$ |
| Max. Peak Reverse Current per leg | I_{RM} 10 μA | $V_{RRM}, T_J = 25^\circ C$ |
| Maximum Reverse Recovery Time per leg | t_{rr} 70 ns | 1/2A, 1A, 1/4A, $T_J = 25^\circ C$ |
| Typical Junction Capacitance per leg | C_J 45 pF | $V_R = 10V, T_J = 25^\circ C, f = 1MHz$ |

*Pulse test: Pulse width 300 μsec Duty cycle 2%

| Thermal and Mechanical Characteristics | | |
|--|-----------------|--------------------------------|
| Storage temp range | T_{STG} | -55°C to 175°C |
| Operating junction temp range | T_J | -55°C to 175°C |
| Max thermal resistance per leg | $R_{\theta JC}$ | 2.0°C/W Junction to case |
| Max thermal resistance per pkg. | $R_{\theta JC}$ | 1.0°C/W Junction to case |
| Mounting torque | | 10-15 inch pounds |
| Weight | | .08 ounces (2.3 grams) typical |

UFT2060 – UFT2080

Figure 1
Typical Forward Characteristics – Per Leg

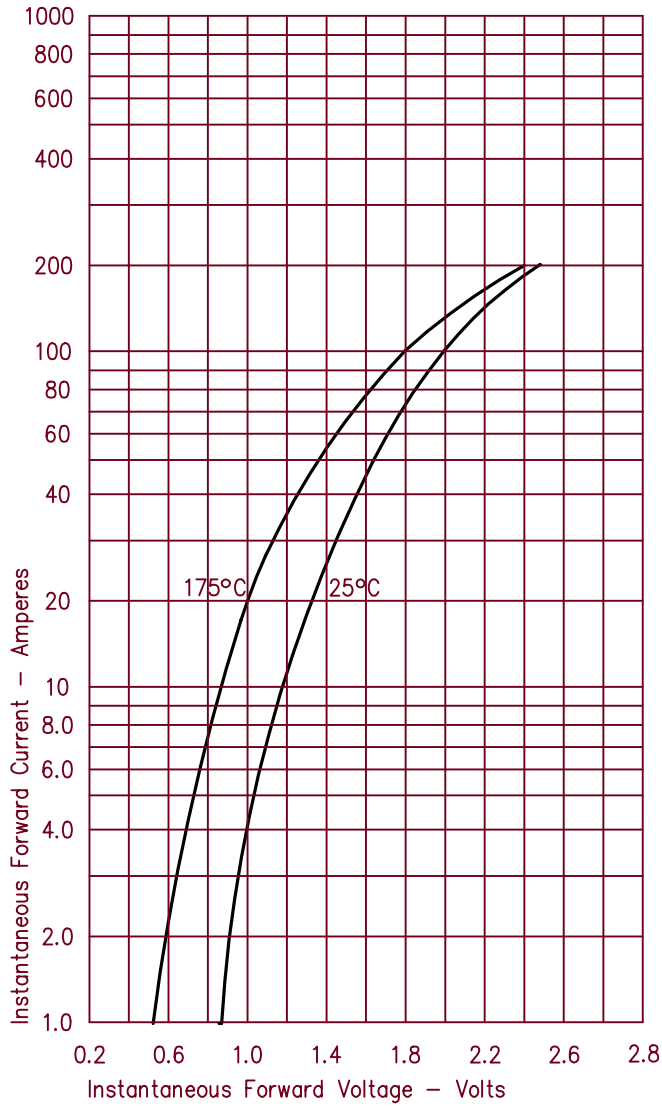


Figure 3
Typical Junction Capacitance – Per Leg

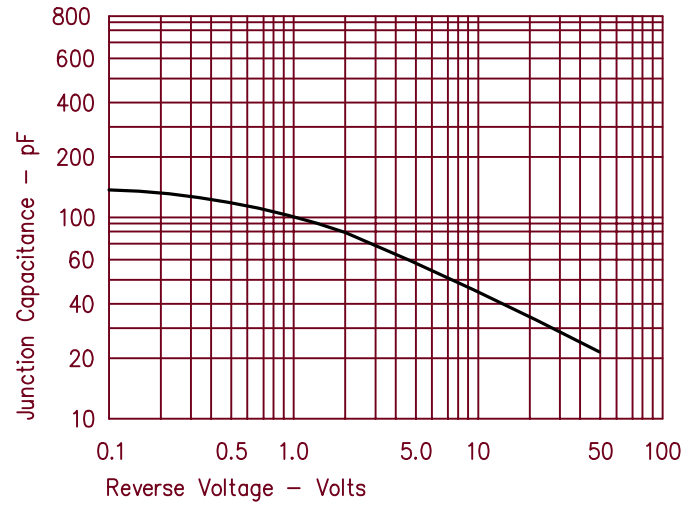


Figure 4
Forward Current Derating – Per Leg

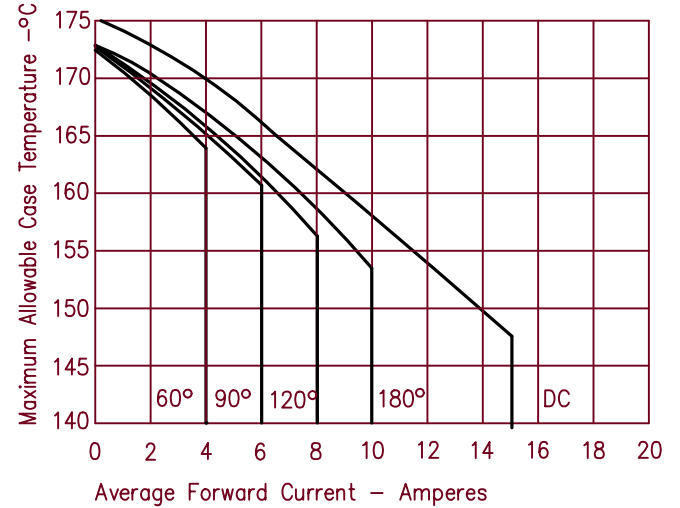


Figure 2
Typical Reverse Characteristics – Per Leg

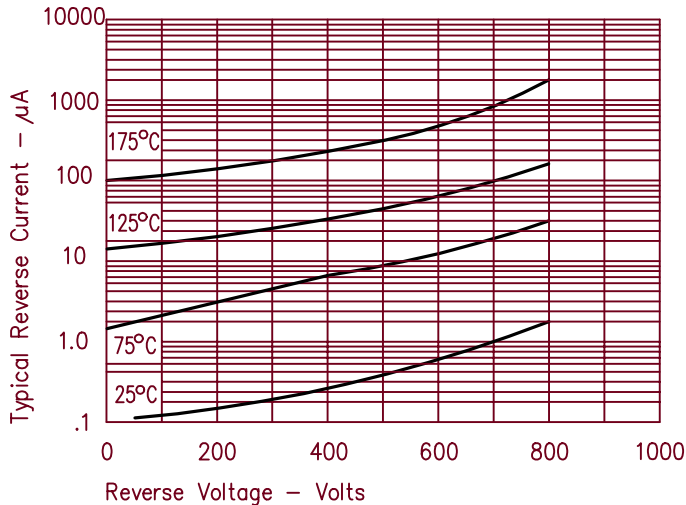


Figure 5
Maximum Forward Power Dissipation – Per Leg

